ABSTRACT

A method and system for adaptive equalization without having to have a phase locked loop to recover the data bits is disclosed. This provides a clock-less equalization method. The algorithm also does not necessitate the digitization of all tap values, as is typically the case for DSP based equalizers. A system and method in accordance with the present invention can be utilized advantageously in devices where binary data is traveling through fiber (both single mode and multi-mode fiber) contaminated by certain characteristics of the fiber, which cause impairments. For a given data frequency, this impairments limit the length of the fiber that can be used for transmission of the data, and thus require equalization.